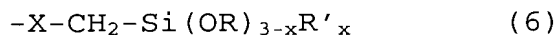


**Patent Claims:**

1. Coating formulations (B) which are curable to coatings having a pencil hardness according to  
5 ISO 15184 of at least HB, which comprise prepolymers (A) which possess alkoxy silane functions of the general formula (6)



10

in which

**R** is hydrogen, alkyl, cycloalkyl or aryl radical having in each case 1 to 6 carbon atoms, the carbon chain being uninterrupted or interrupted by non-  
15 adjacent oxygen, sulfur or NR'' groups,

**R'** is alkyl, cycloalkyl, aryl or arylalkyl radical having in each case 1 to 12 carbon atoms, the carbon chain being uninterrupted or interrupted by nonadjacent oxygen, sulfur or NR'' groups,

20 **R''** is hydrogen, alkyl, cycloalkyl, aryl, aminoalkyl or aspartate ester radical,

**X** is oxygen, sulfur or a group of the general formula (20)

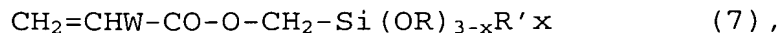
25  $\text{-O-CO-NR''-}$  (20) and

**x** is 0 or 1.

2. Coating formulations (B) of claim 1, wherein the  
30 group **R** is a methyl or ethyl radical.

3. Coating formulations (B) of claim 1 or 2, wherein the silane-functional prepolymers (A) are prepared using silanes of the general formulae (7) and (8)

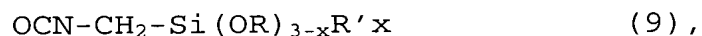
35



where **W** is a CH<sub>3</sub> group or hydrogen and **R**, **R'** and **x** have

the definitions described in connection with the general formula (6) according to claim 1.

4. Coating formulations (B) of claim 1 or 2, wherein  
5 the silane-functional prepolymers (A) are prepared using silanes (A1) of the general formula (9)



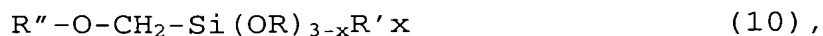
- 10 where **R**, **R'** and **x** have the definitions described in connection with the general formula (6) according to claim 1.

5. Coating formulations (B) of claim 1 to 4, which  
15 comprise catalysts (K) for the purpose of achieving rapid curing of the prepolymers (A).

6. Coating formulations (B) of claim 5, wherein the catalysts (K) are selected from tin catalysts and  
20 tertiary amines.

7. Coating formulations (B) of claim 1 to 6, which as reactive diluents (R) comprise low molecular mass compounds having a viscosity of not more than 5 Pas at  
25 20°C and possessing reactive alkoxysilyl groups via which they can be incorporated into the nascent three-dimensional network as the coating cures.

8. Coating formulations (B) of claim 7, wherein the  
30 reactive diluents (R) are selected from alkyltrimethoxysilanes, alkyltriethoxysilanes, vinyltrimethoxysilane, vinyltriethoxysilane, phenyltrimethoxysilane, phenyltriethoxysilane, tetraethoxysilane, partial hydrolysates of these compounds, and compounds of the  
35 general formulae (10) or (11)



where **R**, **R'**, **R''** and **x** have the definitions described in connection with the general formula (6) according to claim 1.

- 5    9.    Coating formulations (B) of claim 1 to 8, which  
further comprise binders (D) without alkoxysilane  
functions of the general formula (6).
- 10    10.   Coating formulations (B) of claim 1 to 9, which  
are solvent-free.